United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

	•			
APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/705,545	11/10/2003	Chandramouli Srinivasan	030776/2933P	5118
Sandeep Jaggi	7590 02/07/2007		EXAM	IINER
LSI Logic Corporation Intellectual Property Law Dept.			PARDO, THUY N	
	perty Law Dept. ine, M/S D-106	· ·	ART UNIT	PAPER NUMBER
Milpitas, CA 95	•		2165	
SHORTENED STATUTOR	Y PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE	
3 MONTHS		02/07/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

, -	Application No.	Applicant(s)				
	10/705,545	SRINIVASAN ET AL.				
Office Action Summary	Examiner	Art Unit				
	Thuy N. Pardo	2165				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1)⊠ Responsive to communication(s) filed on <u>RCE</u> 2a)□ This action is FINAL . 2b)⊠ This 3)□ Since this application is in condition for allowar closed in accordance with the practice under E	action is non-final. ace except for formal matters, pro	esecution as to the merits is				
Disposition of Claims						
4)⊠ Claim(s) <u>1 and 3-20</u> is/are pending in the applic	ration					
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1, 3-20</u> is/are rejected.	•					
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9) The specification is objected to by the Examiner						
10) The drawing(s) filed on is/are: a) acce	pted or b) objected to by the E	Examiner.				
Applicant may not request that any objection to the o						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
) ·						
Attachment(s)						
1) Notice of References Cited (PTO-892)	4) Interview Summary (
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 5) Notice of Informal Patent Application						
Paper No(s)/Mail Date 6) Other:						

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

- 1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 05, 2006 has been entered.
- 2. In the Amendment filed on December 05, 2006, claims 1 and 3-20 are pending in the application. Claim 2 has been canceled, and claims 1, 3, 7 and 15 have been amended.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Art Unit: 2165

3. Claims 1 and 3-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saeki, US Patent Application Publication No. 2004/0039730 in view of Payton et al. (Hereinafter "Payton") US Patent Application No. 2005/0015368.

As to claim 1, Saeki teaches the invention substantially as claimed, comprising:

- (a) storing query web interface data, including attributes for a database, in one more tables [storing query statement (SQL format) including attributes such as "AA", "CC" or "EE" in a physical table, see fig. 8; 0078; 0081];
- (b) retrieving the attributes from the table and displaying the attributes on a graphical user interface web page for user selection [candidate items which are contained in the displayed tables can be freely selected, 0087];
- (c) dynamically generating a SQL query based on the attributes selected by the user [selection for items based on predetermined SQL, 0034-0035]; and
- (d) displaying results of the SQL query to the user in graphical format [result data, see fig. 12-13], thereby enabling dynamic generation of custom queries [normalized query statements, fig. 8-14]; and

allowing a user to select any combination of attributes on the GUI [query statement (selection of attributes from different tables) in SQL format, see fig. 8].

However, Saeki does not explicitly teach displaying a functionally categorized listing of query attributes on a GUI although it has the same functionality of serving as Internet environment [0132; 0137].

Art Unit: 2165

Payton teaches displaying a functionally categorized listing of query attributes on a GUI [0043; fig. 3A, 5; 0138; 0141].

Therefore, it would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention to add the feature of Payton to the system of Saeki as an essential means to allow the user to select any combination of attributes in different levels of different categories for each new user request.

As to claim 15, Saeki and Payton teach the invention substantially as claimed. Saeki further teaches a client computer coupled to a network [user terminal, fig. 1]; a server coupled to the network in communication with the client computer [application server and database server, 0062; fig. 1]; and a query engine executing on the server [search engine, 0133], the query engine functioning to, generate and display GUI pages on the client computer for user selection of database attributes [0064], using the inputs provided by the user to automatically generate a SQL query to retrieve data from a database and display results of the query to the user in graphical format, thereby enabling dynamic generation of custom queries [S101-S11o of fig. 6, 1; ab].

As to claim 3, Saeki and Payton teach the invention substantially as claimed. Saeki further teaches that the graphic format for displaying the results includes an X-axis and Y-axis [see fig. 8-9].

As to claim 4, Saeki and Payton teach the invention substantially as claimed. Saeki further teaches that in order to generate the SQL query, requiring at least a first attribute to be

Art Unit: 2165

plotted along the X-axis, a second attribute to be plotted along the Y-axis, wherein the first attribute comprises an X attributes and the second attribute comprises a Y attribute, and a process factor to apply to the Y attribute [fig. 8-9].

As to claim 5, Saeki and Payton teach the invention substantially as claimed. Saeki further teaches allowing the user to select a series attribute, wherein the series attribute represents a query parameter that is used to group Y attribute values plotted [grouping A, B, C, fig. 7].

As to claim 6, Saeki and Payton teach the invention substantially as claimed. Saeki further teaches allowing the user to select a filter, wherein the filter is a group of attributes that are used to restrict the scope of a query [fig. 7].

As to claim 7, Saeki and Payton teach the invention substantially as claimed. Saeki further teaches allowing the user to form a query from a basic query page or a query customization page [fig. 8; 0035; 0091].

As to claim 8, Saeki and Payton teach the invention substantially as claimed. Saeki further teaches displaying on the basic query page rows of attributes, where each row includes a field for an attribute type, an attribute description, and process factors that are used to calculate Y attribute values [name, salary, premium, tax, to calculate Y attribute values, see fig. 12].

Art Unit: 2165

As to claim 9, Saeki and Payton teach the invention substantially as claimed. Saeki further teaches allowing queries to be formed as single attribute queries or multiple attribute queries, wherein a single attribute query only includes an X attribute where a result of a query is displayed as a distribution, and wherein in a multiple attribute query, the user chooses X and Y attributes [fig. 12-13].

As to claim 10, Saeki and Payton teach the invention substantially as claimed. Saeki further teaches storing the attribute data in at least two attribute tables [see fig. 12-13].

As to claim 11, Saeki and Payton teach the invention substantially as claimed. Saeki further teaches generating the query by inserting into a SQL SELECT statement, table and column names for the selected attributes, an X attribute value set, and a series value set.

As to claim 12, Saeki and Payton teach the invention substantially as claimed. Saeki further teaches retrieving the table and column names for the selected attributes from one or more of the attribute tables.

As to claim 13, Saeki and Payton teach the invention substantially as claimed. Saeki further teaches inserting the X attribute value set, and a series value set into a WHERE clause of the SQL statement.

Art Unit: 2165

As to claim 14, Saeki and Payton teach the invention substantially as claimed. Saeki

Page 7

further teaches creating respective SQL SELECT statements joined together by a UNION

statement for each of the X attribute values [fig. 5, 8-9, 13-15; 0009; 0081; 0150].

As to claim 16, Saeki and Payton teach the invention substantially as claimed. Saeki

further teaches that the query engine comprises a page builder, page builder tables, a query

processor, a database layer, and presentation logic [0069; fig. 5-9].

As to claim 18, Saeki and Payton teach the invention substantially as claimed. Saeki

further teaches that the page builder displays the attributes on the GUI pages by accessing the

attributes from the page builder tables [fig. 1-2; ab].

As to claim 20, Saeki and Payton teach the invention substantially as claimed. Saeki

further teaches that the presentation logic implements a charting engine that displays the results

of the executed SQL query to the user in tabular or chart format [calculation syntax definition,

fig. 8].

As to claims 17 and 19, all limitations of these claims have been addressed in the analysis

above, and these claims are rejected on that basis.

Response to Arguments

Art Unit: 2165

4. Applicant's arguments with respect to claims 1 and 3-20 have been considered but are

moot in view of the new ground(s) of rejection.

Applicant argues that Saeki does not teach using inputs provided by the user to

automatically generate a SQL query to retrieve data from a database.

Examiner respectfully disagrees. See retrieval SQL request from the user in fig. 7-8 and

then the system will automatically generate SQL query and display the results to the user [see

fig. 12, 13].

5. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Thuy Pardo whose telephone number is 571-272-4082. The

examiner can normally be reached on Mon-Thur.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Jeffrey Gaffin can be reached on 571-272-4146. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

February 02, 2007

THUY N. PARDO PRIMARY EXAMINEI Page 8